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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DAZENSKI, MARC A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,311	Applicant(s) OHIZUMI ET AL.	
	Examiner MARC DAZENSKI	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37,38 and 41-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37,38 and 41-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3-9-10, 4-27-10, 7-9-10, 8-19-10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9 March 2010 has been entered.

Response to Arguments

Applicant's arguments with respect to claims **37-38 and 41-42** have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 9 March 2010 have been fully considered but they are not persuasive. An explanation as to the non-persuasiveness is included below.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the recitation of page 10, paragraph 3 of the remarks: "...controlling the downloading of content such that the content cannot directly access the storage medium or having content played back while controlling the execution or reproduction of the content so it cannot gain access to other content or other areas of the storage medium.") are not recited in the rejected claim(s). Although the claims are interpreted in

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light of the specification, limitations from the specification are not read into the claims.

See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims 38 and 46 are rejected under 35 U.S.C. 101 as not falling within one of

the four statutory categories of invention. Supreme Court precedent[1] and recent

Federal Circuit decisions[2] indicate that a statutory "process" under 35 U.S.C. 101

must (1) be tied to another statutory category (such as a particular apparatus), or (2)

transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example, a process of a file accessing method for accessing content configuration files with the use of a recording and reproducing apparatus comprising a processing unit instructing an installation processing unit is of sufficient breadth that it would be reasonably interpreted as a series of steps completely performed mentally, verbally or without a machine. In particular, the claimed "processing unit" of claim 38 (see at least lines 9-12) is not sufficiently defined to the extent that it precludes non-statutory embodiments (i.e., the lack of a particular definition of what comprises this "processing unit" means that it can be broadly interpreted to read on, for example, a person enacting the method on paper).

^[1] *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

^[2] *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

Claim 41 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Said claim discloses a "computer readable storage medium" (line 1). Both said claim and the respective specification fail to disclose whether said "computer readable storage medium" is limited to a non-transitory medium or transitory propagating signal. Reading said claim under the broadest

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reasonable interpretation "computer readable storage medium" is considered to read on a transitory propagating signal. See the Subject Matter Eligibility of Computer Readable Media memo dated February, 23 2010 (1351 OG 212). A claim directed to only signals per se is not a process, machine, manufacture, or composition of matter and therefore is not directed to statutory subject matter. See MPEP § 2106. Thus, both said claim and said specification fail to define said "computer readable medium" to be statutory media.

Note:

A "signal" (or equivalent) embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any physical structure or tangible material.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 37-38 and 41-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 37 discloses "wherein the management information includes a conversion table which equally processes the content installed in the certain area of the recording unit and the content recorded on the external recording medium." However, it is unclear as to what this "equally processes" is referring to. For example, given the broadest reasonable interpretation, "equally processes" could refer to giving each content an equal number of processing clock cycles, processing each content for an equal amount

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of time, handling each content as an equivalent file across multiple media, or some other heretofore undisclosed "equal" processing operation. Absent some special definition of the phrase "equally processes" the claim is indefinite. The closest explanation the examiner can find is at page 44, paragraph [0101] of the specification. Therefore, in view of this disclosure, the examiner is interpreting "equally processes" (and the conversion table that is enacting the processing) to mean "processing both the content installed in the certain area of the recording unit and the content recorded on the external recording medium."

Claim 38 is rejected for similar reasons as claim 37 above.

Claim 41 is drawn toward "a computer readable storage medium on which is stored a content, wherein the content" comprises installation instructions to the apparatus of claim 37. The examiner interprets the claim to be the method embodied as a computer program on a medium that allows a computer to act as the apparatus claim 37. However, the claim as written is not commensurate with the specification. If the claimed "content" is acting as a computer program as described above, then the examiner can find no disclosure in the specification for an "installation instruction" that allows a computer to act as the apparatus of claim 37. The closest the examiner can find are at, e.g., page 36, which refer to application programs to be executed by recording and reproducing apparatus (10). However, the examiner notes that these are not applications that allow a computer to act as the apparatus of claim 37, but are rather a "game or application" (see, for example, [0090] which describes the "application program" as "all or some of the information necessary for executing an application,"

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which would correspond to the AV, navigation, and management data of an MPEG-2 encoded of a video such as those disclosed at [[016] and [0021]]. Therefore, in view of this disclosure, the examiner is interpreting the “installation instruction” to mean “control or management data that are included in an application program.

Claim 42 is rejected for similar reasons as claim 41 above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 37-38 and 41-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Uchikoga (US PgPub 2001/0005446), hereinafter referred to as Uchikoga.

Regarding **claim 37**, Uchikoga discloses a recording and reproducing apparatus (see [0091]: “...reference numeral 100 denotes a stream data playback apparatus...”; [0094]: “The distributed stream data is received by and stored in the stream playback apparatus 100.”; see also figures 2 and 7, particularly items 1 and 100, respectively) comprising:

an external interface to connect with an external recording medium having a content recorded thereon (see [0102]: “...communication interface (102) for communicating with the server (300) through the network (200)...”);

a recording unit that records the content read from the external recording medium connected to the external interface; a processing unit that reproduces or executes the recorded content; wherein the processing unit has an installation processing unit that installs the content recorded in the external recording medium together with specified management information into a certain area of the recording unit (see [0102] – [0105]: "...the control unit 101 of the stream data playback apparatus 100...acquires video, audio, and control data distributed from the server 300 (step s12) and stores them in a disk serving as the storage device 105..." wherein the control data reads on "management information");

wherein the processing unit instructs the installation processing unit to install based on an installation instruction from the content that is reproduced or executed by the processing unit; wherein the installation process to the certain area of the recording unit cannot be executed by other than the installation processing unit (see [0046] – [0048]: "The authentication unit 42 performs mutual authentication with the external server 90...If mutual authentication is not normally done in the authentication unit 42, no program is loaded."; see the entirety of [0092]; see [0105]: "...the control unit 101 of the playback apparatus 100 reads out the control data stored in the disk, and performs playback processing of the video and audio data in the disk in accordance with the control data."; see also figures 10-11 which detail playback processes A through D, particularly steps s12 and s13 which show control data being saved to disk);

wherein the recording unit records and has a management information file of the specified management information (see [0102] – [0105]: "...the control unit 101 of the

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stream data playback apparatus 100...acquires video, audio, and control data distributed from the server 300 (step s12) and stores them in a disk serving as the storage device 105..." wherein the control data reads on the "management information");

wherein the management information includes a conversion table which equally processes the content installed in the certain area of the recording unit and the content recorded on the external recording medium (see [0113] – [0114]: "If the playback apparatus 100 determines that the stream data can be played back...it executes the playback processes A to D of playing back video and audio data in the memory buffer in accordance with control data in the memory buffer...The playback apparatus 100 performs multitask processing of receiving stream data from the server 300 and storing them in the memory buffer" wherein the control data reads on the "conversion table");

a loading unit that reads contents recorded in the recording unit and the external recording medium based on the conversion table; and wherein the processing unit is able to load the content only through the loading unit (see [0116]: "Then, the server 300 distributes the control data to the playback apparatus 100, and the playback apparatus 100 receives the control data and stores it in the memory buffer or disk...The playback apparatus 100 reads out the stored control data, and executes the playback processes A to D of playing back video and audio data in accordance with the control data (step s66).").

Regarding **claim 38**, the examiner maintains the claim is merely the corresponding method to the apparatus of claim 37, and is therefore rejected in view of the explanation set forth in claim 37 above.

Regarding **claim 41**, Uchikoga discloses everything claimed as applied above (see claim 37). Further, Uchikoga discloses a computer readable storage medium on which is stored a content, wherein the content is configured and arranged so as to include the installation instruction to be supplied to the recording and reproducing apparatus of claim 37 (see [0102]: "...a storage device 105 such as a disk for storing distributed video and audio data..."; [0105]: "...control data...stores them in...storage device 105...the playback apparatus 100 reads out the control data stored in the disk, and performs playback processing of the video and audio data in the disk in accordance with the control data.").

Regarding **claim 42**, Uchikoga discloses everything claimed as applied above (see claim 38). Further, Uchikoga discloses a computer on which is stored a computer program, the computer program being configured and arranged so as to cause the computer to execute the file accessing method of claim 38 (see [0036] – [0037]: "The present invention can be implemented by a computer...Note that the multimedia information playback apparatus 1 may be constituted by replacing the decoder 16 as a device with a program for decoding data read out from the HDD 18 to the RAM 12").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchikoga (US PgPub 2001/0005446), hereinafter referred to as Uchikoga, in view of Cheng (US Patent 7,096,491), hereinafter referred to as Cheng.

Regarding **claim 43**, Uchikoga discloses everything claimed as applied above (see claim 37). Further, Uchikoga discloses wherein the processing unit is configured so as to add access constraints to the recorded content that can be reproduced or executed by the recording and reproducing apparatus (see [0092]: "Control data has functions of limiting playback contents, e.g., a user operation limitation function, playback channel limitation function....playback stream data limitations function, and a function of checking user operation and playing back a stream.").

However, Uchikoga fails to disclose the remaining limitations of the claim. The examiner maintains it was well known to include the missing limitations, as taught by Cheng.

In a similar field of endeavor, Cheng discloses mobile code security architecture in an application service provider environment (see title). Further, Cheng discloses the access constraints being established for controlling access by the content during said reproducing or executing to local resources of the recording and reading apparatus based on the process of the content (see column 2, line 41 through column 3, line 16

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with particular emphasis on column 3, lines 7-16: "...the subscription information includes parameters controlling the execution of specified functions of an application and parameters controlling access by the application to local resources...While the application is running, the ASP controls access to local resources based also on the subscription information."; column 5, lines 14-28: "...the security application 234 may containing application program interface (API) access conditions and a resource access privilege request...The resource access privilege request is any request that specifies the type of local resource 218 access that is needed for the application 232 to complete certain tasks."; column 8, lines 12-16: "If the user 220 has given permission, then the application 232 is run 146 according to the p"rameters of the user's subscription, and the security manager 216 controls access by the application 232 to local resources 218.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Uchikoga to include the teachings of Cheng, for the purpose of protecting an end user from malicious code downloaded from an external source.

Regarding **claim 44**, Uchikoga discloses everything claimed as applied above (see claim 37). Further, Uchikoga discloses wherein during said installing, the processing unit adds access constraints to the recorded content that can be reproduced or executed by the recording and reproducing apparatus (see [0092]: "Control data has functions of limiting playback contents, e.g., a user operation limitation function,

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playback channel limitation function....playback stream data limitations function, and a function of checking user operation and playing back a stream.”).

However, Uchikoga fails to disclose the remaining limitations of the claim. The examiner maintains it was well known to include the missing limitations, as taught by Cheng.

In a similar field of endeavor, Cheng discloses mobile code security architecture in an application service provider environment (see title). Further, Cheng discloses the access constraints being established for controlling access by the content during said reproducing or executing to local resources of the recording and reading apparatus based on the process of the content (see column 2, line 41 through column 3, line 16 with particular emphasis on column 3, lines 7-16: “...the subscription information includes parameters controlling the execution of specified functions of an application and parameters controlling access by the application to local resources...While the application is running, the ASP controls access to local resources based also on the subscription information.”; column 5, lines 14-28: “...the security application 234 may containing application program interface (API) access conditions and a resource access privilege request...The resource access privilege request is any request that specifies the type of local resource 218 access that is needed for the application 232 to complete certain tasks.”; column 8, lines 12-16: “If the user 220 has given permission, then the application 232 is run 146 according to the parameters of the user’s subscription, and the security manager 216 controls access by the application 232 to local resources 218.”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Uchikoga to include the teachings of Cheng, for the purpose of protecting an end user from malicious code downloaded from an external source.

Regarding **claim 45**, Uchikoga discloses everything claimed as applied above (see claim 37). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 43 above (wherein the “local resources 218” disclosed in Cheng reads on the claimed, “...a memory operable coupled to the processing unit.”).

Regarding **claim 46**, Uchikoga discloses everything claimed as applied above (see claim 38). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 43 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARC DAZENSKI whose telephone number is (571) 270-5577. The examiner can normally be reached on M-F, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter-Anthony Pappas can be reached on (571) 272-7646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARC DAZENSKI/
Examiner, Art Unit 2621

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